## **Recovery Plan Action Status**

Plan Name: Recovery Plan for Astragalus bibullatus (Pyne's ground-plum)

Plan Status: Final Plan Date: 09-Aug-11 Lead Agency: USFWS

Lead Office; Tennessee Ecological Services Field Office 528-6481)

Species	Action Priority #	Action #	Action Description	Action Status	Est. Initiation Date	Est. Completion Date	Responsible Parties	Work Type	Labor Type	Action Comments
Guthrie's (=Pyne's) ground-plum (Astragalus bibullatus)	1	1.1	Acquire habitat.	Ongoing Not Current			The Nature Conservancy, Southeast Region, Ecological Services Division, Tennessee Department of Environment and Conservation, Murfreesboro City Government, Rutherford County Government	Acquisition	Labor type not yet selected	
Guthrie's (=Pyne's) ground-plum (Astragalus bibullatus)	1	1.2	Pursue protection with landowners.	Ongoing Not Current			The Nature Conservancy, Southeast Region, Ecological Services Division, Tennessee Department of Environment and Conservation, Murfreesboro City Government, Rutherford County Government	Work type not yet selected	Labor type not yet selected	
Guthrie's (=Pyne's) ground-plum (Astragalus bibullatus)	2	2	Search for new occurrences.	Ongoing Current			Southeast Region, Ecological Services Division, Tennessee Department of Environment and Conservation, a university, research center, or private landowner	Work type not yet selected	Labor type not yet selected	
Guthrie's (=Pyne's) ground-plum (Astragalus bibullatus)	2	3.1	Develop a written protocol for monitoring A.bibullatus occurrences.	Ongoing Current			Southeast Region, Ecological Services Division, Tennessee Department of Environment and Conservation, Missouri Botanical Garden, a university, research center, or private landowner	Work type not yet selected	Labor type not yet selected	

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Guthrie's (=Pyne's) ground-plum (Astragalus bibullatus)	2	3.2	Monitor population structure, demographic processes, and threats.	Ongoing Current			National Park Service, Southeast Region, Ecological Services Division, Tennessee Department of Environment and Conservation, Missouri Botanical Garden, a university, research center, or private landowner	Work type not yet selected	Labor type not yet selected	
Guthrie's (=Pyne's) ground-plum (Astragalus bibullatus)	2	3.3	Assess population growth rates and viability.	Ongoing Current			National Park Service, Southeast Region, Ecological Services Division, Tennessee Department of Environment and Conservation, Missouri Botanical Garden, a university, research center, or private landowner	Work type not yet selected	Labor type not yet selected	
Guthrie's (=Pyne's) ground-plum (Astragalus bibullatus)	2	4.1	Study life history and ecological requirements.	Ongoing Current			Southeast Region, Ecological Services Division, Tennessee Department of Environment and Conservation, Missouri Botanical Garden, a university, research center, or private landowner	Work type not yet selected	Labor type not yet selected	
Guthrie's (=Pyne's) ground-plum (Astragalus bibullatus)	2	4.2	Study reproductive biology.	Ongoing Not Current			National Park Service, Southeast Region, Ecological Services Division, Tennessee Department of Environment and Conservation, Missouri Botanical Garden, a university, research center, or private landowner	Work type not yet selected	Labor type not yet selected	

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Guthrie's (=Pyne's) ground-plum (Astragalus bibullatus)	2	4.3	Study pollination ecology.	Not Started			National Park Service, Southeast Region, Ecological Services Division, Tennessee Department of Environment and Conservation, Missouri Botanical Garden, a university, research center, or private landowner	Work type not yet selected	Labor type not yet selected	
Guthrie's (=Pyne's) ground-plum (Astragalus bibullatus)	2	5.1	Maintain plant and seed sources ex situ.	Ongoing Current			Southeast Region, Ecological Services Division, Tennessee Department of Environment and Conservation, Missouri Botanical Garden	Work type not yet selected	Labor type not yet selected	
Guthrie's (=Pyne's) ground-plum (Astragalus bibullatus)	2	5.2	Identify suitable unoccupied habitat.	Not Started			National Park Service, Southeast Region, Ecological Services Division, Tennessee Department of Environment and Conservation, Missouri Botanical Garden, a university, research center, or private landowner	Work type not yet selected	Labor type not yet selected	
Guthrie's (=Pyne's) ground-plum (Astragalus bibullatus)	2	5.3	Establish new occurrences.	Ongoing Current			National Park Service, Southeast Region, Ecological Services Division, Tennessee Department of Environment and Conservation, Missouri Botanical Garden, a university, research center, or private landowner	Work type not yet selected	Labor type not yet selected	

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Guthrie's (=Pyne's) ground-plum (Astragalus bibullatus)	2	5.4	Augment existing occurrences, where necessary.	Not Started			Southeast Region, Ecological Services Division, Tennessee Department of Environment and Conservation, Missouri Botanical Garden, a university, research center, or private landowner	Work type not yet selected	Labor type not yet selected	
Guthrie's (=Pyne's) ground-plum (Astragalus bibullatus)	3	6	Communicate with local officials to coordinate city and county planning.	Not Started			Southeast Region, Ecological Services Division, Tennessee Department of Environment and Conservation, Murfreesboro City Government, Rutherford County Government	Work type not yet selected	Labor type not yet selected	
Guthrie's (=Pyne's) ground-plum (Astragalus bibullatus)	3	7	Develop and implement public education plans.	Not Started			The Nature Conservancy, Southeast Region, Ecological Services Division, Tennessee Department of Environment and Conservation, Murfreesboro City Government, Rutherford County Government	Work type not yet selected	Labor type not yet selected	
Guthrie's (=Pyne's) ground-plum (Astragalus bibullatus)	3	8	Periodically assess the success of recovery efforts for the species.	Ongoing Current			Southeast Region, Ecological Services Division, Tennessee Department of Environment and Conservation	Work type not yet selected	Labor type not yet selected	